GB

GERRIETS INTERIOR ACOUSTIC SOLUTIONS

SOUND TRANSPARENT FABRICS

The flow resistance is one of the important factors which influence the sound absorption of a material. Materials with a very low flow resistance can be defined as sound transparent.

The quotient of the difference in air pressure Δp [Pa] between the two faces of a sheet of porous material by the particle velocity u [m/s] of airflow through the sheet is defined as the specific flow resistance:

$$R_S = \Delta p / u \ [Pa\ s/m]$$

The specific flow resistance of any porous material increases with an enlarging thickness of the absorber. As the defining parameter in relation with the specific thickness d [m], the length related flow resistance can be defined:

$$r = R_S / d \ [Pa\ s/m^2]$$

The following materials show a very low specific flow resistance and are therefore applicable as speaker cloth or sound transparent screens:

Material	**R_S [Pa s/m]**	**Weigth [g/m²]**
SHEER MUSLIN CO	12,5	90
Front Projection Screen OPERA® WHITE 2.2 MICRO	21	390
MEGASTRETCH 450	34,5	95
BANNER MATERIAL CS	72	150
Theatre linen KANDEL	79	300
Filled cloth TRISTAN	107	200
SUPER CANVAS CS	212,5	300
GERRA CS	250	285

Date: 09.10.2025

Gerriets GmbH • Im Kirchenhürstle 5-7 • D-79224 Umkirch • Tel. +49 7665 960-0 • info@gerriets.com • gerriets.com

All information is subject to change or technical modification without notice.

GERRIETS© 2025